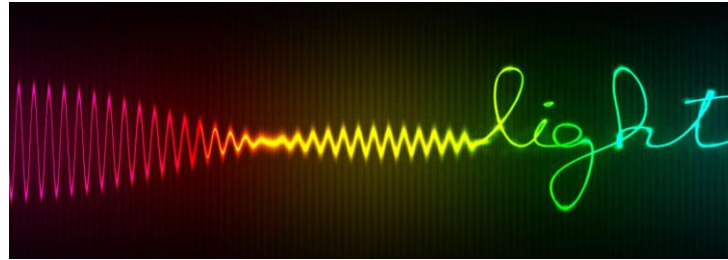


# Year 6: Light Knowledge Mat

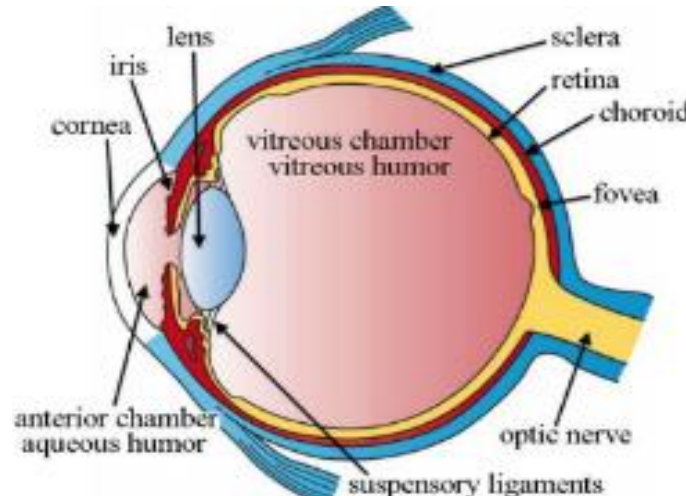
## Subject Specific Vocabulary

<b>light wave</b>	One of the characteristics of light is that it behaves like a wave. Light can be defined by its wavelength and frequency. The frequency is how fast the waves vibrate up and down.
<b>light source</b>	Light, or illumination, is a form of energy that travels in waves, like sound. You can find different sources of light, such as a candle or the sun.
<b>concave</b>	Is a lens that curves inwards and reflects light differently as a result.
<b>convex</b>	Is a lens that curves outwards and reflects light differently as a result.
<b>filters</b>	A filter is a transparent material that absorbs some colours and allows others to pass through.
<b>lens</b>	A lens is a curved piece of glass or plastic designed to refract light in a specific way.
<b>retina</b>	The retina is at the back of your eye and it has light-sensitive cells called rods and cones.
<b>cornea</b>	The cornea is thin, clear and covers your eye. It's important because it helps you see by focusing light as it enters the eye.
<b>iris</b>	By opening and closing the pupil, the iris can control the amount of light that enters the eye.
<b>pupil</b>	The pupil can be compared with the shutter of a camera. It is surrounded by the iris which is the coloured part of the eye.



## Working Scientifically

- ❑ \*planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- ❑ \*taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- ❑ \*recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- ❑ \*using test results to make predictions to set up further comparative and fair tests
- ❑ \*identifying scientific evidence that has been used to support or refute ideas or arguments



## Sticky Knowledge about Light

- ❑ Light will travel in a completely straight line until it hits an object that will reflect it.
- ❑ Space does not have any light. We can see things in space due to light bouncing off of the objects in space.
- ❑ Light doesn't travel as fast when it has to pass through mediums that are different, such as air, water or glass.
- ❑ The light that we see from the sun actually left the sun ten minutes before we see it.
- ❑ Light can be controlled and produced in so many ways. A camera can control the amount of light that comes into the camera lens. We also use light in televisions, medical systems, copy machines, telescopes and satellites.
- ❑ Light is used by plants to convert the light into energy as their 'food'. The process is called 'photosynthesis' and converts carbon dioxide through the energy of the light.